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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,686	03/28/2000	Yoshiko Sakagawa	48864-026	5237

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EXAMINER	
KIBLER, VIRGINIA M	

ART UNIT	PAPER NUMBER
2623	12

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/536,686	SAKAGAWA ET AL.	
	Examiner	Art Unit	
	Virginia M Kibler	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 17-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,17-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment received on 12/19/03 has been entered. Claims 1-9 and 17-23 remain pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-9 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano et al. (6,031,941) in view of Lanne et al. (4,663,658).

Regarding claim 1, Yano et al. ("Yano") discloses a three-dimensional data input method for inputting three-dimensional data using a three-dimensional data input apparatus that is constructed to input the three-dimensional data of an object displayed on a monitor screen 12 by shooting the object (Col. 3, lines 35-41), the method including generating image data of a 3-D shape model in accordance with the 3-D data inputted from a part of the object, the image corresponding to the shape of the 3-D data (Figure 5, element 55; Col. 3, lines 63-67, Col. 4, lines 1-20). Yano discloses using the display as a guide for framing the image of the object in the finder window and then shooting the object (Col. 3, lines 62-67 and Col. 4, lines 1-7). Yano discloses using the display in order to allow the user to monitor the input operation of the images to ensure the desired 3-D data are obtained (Col. 14, lines 38-40) and shooting the object after

the framing is performed (Col. 7, lines 58-64). Yano further discloses inputting images while sequentially monitoring the displayed 3-D shape of the object to be measured (Col. 11, lines 64-67) and using the displayed 3D model to confirm that the desired three-dimensional data is obtained (Col. 11, lines 35-63). Yano does not expressly disclose displaying the image to perform framing so that the guide image is overlapped on an image of the object image before shooting the object. However, Lanne et al. ("Lanne") teaches that it is known to perform framing so that the guide image is overlapped on the object image (Abstract). Lanne teaches assisting positioning of an object by displaying a model on a screen and using the model as a guide (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the monitoring of the 3-D shape of the object while inputting images disclosed by Yano to include using a model as a guide on the display as taught by Lanne because it is well-known in the art and assists in correct positioning to ensure the needed overlapping portions of the acquired images.

Regarding claim 2, the arguments analogous to those presented above for claim 1 are applicable to claim 2.

Regarding claim 3, Yano discloses a memory 14 for memorizing the 3-D data of the object obtained by the shooting (Figure 2).

Regarding claim 4, Yano discloses the image generator generates the 3-D model image in accordance with the data memorized in the memory (Col. 6, lines 57-67 and Col. 7, lines 1-4).

Regarding claim 5, the arguments analogous to those presented above for claim 1 are applicable to claim 5.

Regarding claim 6, Yano does not appear to disclose matching the image of the input portion with the guide image so that the scale of the guide image agrees with the scale of the object. However, Lanne teaches that it is known to match the image of the input portion with the guide image so that the scales agree (Col. 1, lines 29-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the guiding disclosed by Yano to include the matching as taught by Lanne because it will facilitate positioning of the object

Regarding claim 7, Yano discloses the shooting performed for plural positions different from each other (Col. 4, lines 8-13).

Regarding claim 8, Yano discloses the image of the 3-D shape model is retrieved from the memory (Fig. 8, memory 552; Col. 14, lines 15-20).

Regarding claim 9, Yano discloses the plurality of the image of 3-D shape model is memorized (Abstract; Col. 6, lines 57-67 and Col. 7, lines 1-4).

Regarding claims 17 and 20, the arguments analogous to those presented above for claim 1 are applicable to claims 17 and 20. Yano discloses memorizing attribute information in a memory, the attribute information being about data of a 3-D shape model having a shape that is substantially the same as the shape of the object (Col. 6, lines 57-67, Col. 7, lines 1-4) and a position for observing the 3-D shape model (Figure 3).

Regarding claims 18 and 19, the arguments analogous to those presented above for claims 6 and 7 are applicable to claims 18 and 19, respectively.

Regarding claim 21, the arguments analogous to those presented above for claim 6 are applicable to claim 21.

Regarding claims 22 and 23, the arguments analogous to those presented above for claims 3 and 4 are applicable to claims 22 and 23, respectively.

Response to Arguments

4. Applicant's arguments filed 12/19/03 have been fully considered but they are not persuasive.

Summary of Applicant's Response: Yano does not suggest displaying an image of a 3-D shape model as a guide image and then performing framing in accordance with this guide image or that framing is performed so that the guide image is overlapped on an image of the object that corresponds to the guide image. The framing disclosed by Yano is merely to locate the object to be measured in the center of the finder window. Lanne has no relationship to the forming of the 3-D model disclosed in Yano.

Examiner's Response: Yano discloses inputting images while monitoring the displayed 3-D shape of the object to be measured (Col. 11, lines 35-67, Col. 12, lines 1-6), thereby suggesting displaying an image of a 3-D shape model as a guide image. Yano discloses that he respective sensed images must include overlapping portions to allow image synthesis (Col. 4, lines 16-20). In order to ensure the sensed images include overlapping portions, Yano discloses using the display as a guide for shooting the object (Col. 3, lines 63-67, Col. 4, lines 1-8), using the displayed 3D model to confirm that the desired three-dimensional data is obtained (Col. 11, lines 35-63), and inputting images while sequentially monitoring the displayed 3-D shape of the object to be measured (Col. 11, lines 64-67). Lanne is not relied upon for forming a 3-D model.

Lanne merely illustrates that it is well known to display a model on a screen as a guide for positioning. Lanne teaches overlapping an image with a guide image on a display (Abstract).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia M Kibler whose telephone number is (703) 306-4072. The examiner can normally be reached on Mon-Thurs 8:00 - 5:30 and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VK
3/2/04

MEHRDAD DASTOURI
PRIMARY EXAMINER